Determination of river morphometry of the river waters

During each sampling occasion and site, the estuary channel morphometry; width (m), depth (m), current velocity (m/s) and discharge (m3/s) variables were measured at three sampling points; downstream, upstream and mid-stream. River width and depth were estimated with a measuring tape and weighted graduated rope at a minimum of 5 points across the river at every reach location as described by Masese *et al.* (2014). River means current velocity was estimated in triplicate using timed drift across a known distance at every reach (Plate 3a and b). The data was used to estimate mean discharge following Gordon *et al.* (2004) (Equation 1).

Where; Q = Discharge (m3/s), V = Mean current velocity (m/s) and A = Cross-sectional area of the river channel (m2)